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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FERGUSON, KEITH

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/700,585

**Applicant(s)**

LIPSANEN ET AL.

**Examiner**

Keith T. Ferguson

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1,4,6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Bushnell, newly recited reference..

Regarding claim 1, Rainey et al. discloses a method of providing information (accounting information) relating to a telecommunication call in a telecommunication network to a data storage system (central automatic message account system (CAMA) or local automatic message account system (LAMA) (col. 2 lines 12-18), the method comprising: receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate, as taught in prior art, fig. 1 and col. 3 lines 42-55), and storing

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the information (call routing set up) at least temporarily at the exchange (before upstream transmission) (col. 2 lines 52-63 and col. 3 lines 45-55); sending an incoming call alert message to a called device (col. 6 lines 10-21); in direct response to receipt of a call answer message (col. 5 line 50 through col. 6 line 5 and col. 6 lines 21-28) and updating billing data within a written automatic accounting record for the call (col. 5 line 50 through col. 6 line 5). Rainey et al. further discloses a fixed access Network (fig. 2) in which telephone device is coupled to the exchange via land lines (fig.2). Rainey et al. differs from claim 1 of the present invention in that it does not explicitly disclose outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record. Bushnell teaches outputting from an originating switch a partial call record to be analyzed by an analysis system (col. 5 line 55 through col. 6 line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record in order for the central automatic message account system (CAMA) or local automatic message account system (LAMA) to track the progress of

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the call between originating end switching office (EO) and terminating end switching office (EO) when they are not cooperatively linked when provide a complete call record for billing, as taught by Bushnell.

Regarding claim 4, Rainey et al. discloses a method of providing information as discussed supra in claim 1 above. Rainey et al. differs from claim 4 of the claimed invention in that it does not disclose outputting from the exchange the callers telephone number (A number). Bushnell teaches outputting from the switch the callers telephone number (col. 5 lines 35-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made To provide Rainey et al. with outputting from the exchange the callers telephone number (A number) in order to identify and properly bill the calling party who is making the call, as taught by Bushnell.

Regarding claim 6, Rainey et al. discloses an apparatus (figs. 2 and 3) for providing information relating (billing details) to a telecommunication call in a telecommunication network to a data storage system (local automatic message accounting or LAMA) (col. 4 lines 28-34), the apparatus

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comprising: first receiving means for receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate, as taught in prior art, fig. 1 and col. 3 lines 42-55), and storing the information at least temporary at the exchange (inherent, the caller information, day, time, and called information is store and sent downstream to a billing system for calculation, as taught in col. 2 lines 52-53 and col. 3 lines 45-55), transmitting means (9) (an ISUP message follows the switch node chain) (fig. 3 ISUP MSG'S) for transmitting an incoming call alert message to a called device (col. 5 lines 40-56); second receiving means for receiving (answer message sent back to the originating switch node) (fig. 3 and col. lines 63-65), in the event that the called device answers or otherwise accepts the incoming call alert (col. 5 lines 60-65), a call answer message sent to the exchange (originating switch) (col. 5 lines 60-65); a response to receipt of said call answer message, from the exchange to said data storage system (col. 5 lines 66-67 and col. 6 lines 1-5), a Call Data Record (automatic message account record) containing at least the received information to properly bill the call in a downstream process (col. 6 lines 1-5).

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Rainey et al. further discloses said first receiving (col. 3 lines 42-55) and second receiving means (receiving an ANM, col. 5 lines 63-65), said transmitting means (transmitting an ISUP MSG'S and col. 5 lines 40-65) are provided as an integral part of the network exchange (fig. 3). Rainey et al. differs from claim 6 of the present invention in that it does not explicit disclose outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record. Bushnell teaches outputting from an originating switch a partial call record to be analyzed by an analysis system (col. 5 line 55 through col. 6 line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record in order for the central automatic message account system (CAMA) or local automatic message account system (LAMA) to track the progress of the call between originating end switching office (EO) and terminating end switching office (EO) when they are not cooperatively linked when provide a complete call record for billing, as taught by Bushnell.

Regarding claim 9, Rainey et al. discloses a telecommunication network (figs. 2 and 3) having a plurality of interconnected exchanges (End Offices) (EO-3 to EO4) for routing calls in the network (col. 2 lines 12-27), and a billing system (billing nodes) coupled to each of said exchanges (col. 5 lines 33-36), each exchange comprising: first receiving means for receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate which sent through different exchanges to a billing system node for calculation, as taught in prior art, fig. 1 and col. 3 lines 42-55 and col. 5 lines 40-55), and storing the information at least temporary at the exchange (inherent, the caller information, day, time, and called information is store and sent downstream to a billing system or through each exchange to a billing system for calculation, as taught in col. 2 lines 52-53, col. 3 lines 45-55 and col. 5 lines 40-55), transmitting means (9) (an ISUP message follows the switch node chain) (fig. 3 ISUP MSG'S) for transmitting an incoming call alert message to a called device (col. 5 lines 40-56), second receiving means for receiving (answer message sent back to the originating switch node) (fig. 3 and col. lines 63-65), in the event that the called



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device answers or otherwise accepts the incoming call alert (col. 5 lines 60-65), a call answer message sent to the exchange (originating switch) (col. 5 lines 60-65); a response to receipt of said call answer message, from the exchange to said data storage system (col. 5 lines 66-67 and col. 6 lines 1-5), a Call Data Record (automatic message account record) containing at least the received information to properly bill the call in a downstream process (col. 6 lines 1-5). Rainey et al. differs from claim 9 of the present invention in that it does not explicit disclose outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record. Bushnell teaches outputting from an originating switch a partial call record to be analyzed by an analysis system (col. 5 line 55 through col. 6 line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting from the exchange to said data storage system a partial Call Data Record containing less call information than a normal call data record in order for the central automatic message account system (CAMA) or local automatic message account system (LAMA) within the network to track the progress of the call between originating end switching office (EO) and terminating end switching office (EO) when they

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are not cooperatively linked when provide a complete call record for billing, as taught by Bushnell.

3. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Bushnell as applied to claims 1 and 6 above and in further view of Amin et al..

Regarding claim 2, the combination of Rainey et al. and Bushnell differs from claim 2 of the present invention in that they do not disclose a cellular radio telephone network and the call is made from a cellular radio telephone device. Amin et al. teaches a cellular radiotelephone network (fig.1) and the call is made from a cellular radiotelephone device (fig. 1 number 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. and Bushnell with a cellular radio telephone network and the call is made from a cellular radio telephone device in order to provide wireless telephone switching, wireless tracking, and to monitor the cellular radio telephone device wireless usage for billing when communicating with a land line telephone, as taught by Amin et al..

Regarding claim 8, the combination of Rainey et al. and Bushnell differs from claim 8 of the present invention in that

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they do not disclose a cellular radio telephone network and said exchange being a Mobile Switching Centre (MSC) of the cellular network. Amin et al. teaches a cellular radio telephone network (fig. 1) and said exchange being a Mobile Switching Centre (MSC) of the cellular network (fig. 1 number 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. and Bushnell with a cellular radio telephone network and said exchange being a Mobile Switching Centre (MSC) of the cellular network in order to provide wireless switching and tracking within a wireless telephone system, and for coordinating billing reports for wireless telephone service between a wireless subscriber and wire line subscriber, as taught by Amin et al..

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Bushnell and Amin et al. as applied to claims 1 and 2 above and in further view of Plush et al., and Vaziri et al..

Regarding claim 3, the combination of Rainey et al., Bushnell and Amin et al. differs from claim 3 of the present invention in that they do not disclose a GSM network and said exchange from which the Call Data Record is output is a Mobile Switching Center, and outputting from the Mobile Switching Center

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a partial call data record comprising a subscriber telephone number. Plush et al. teaches a GSM network (fig. 1 and col. 3 lines 32-34) and said exchange from which the Call Data Record is output is a Mobile Switching Center (col. 3 lines 47-61 and fig. 2 numbers 2 and 16), and outputting from the Mobile Switching Center at least one of an IMSI code (col. 3 lines 63-67).

Vaziri et al. teaches an internet switch box (server) that generates a partial billing record which contains a telephone number (paragraph 0158). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rainey et al., Bushnell and Amin et al. with a GSM network and said exchange from which the Call Data Record is output is a Mobile Switching Center, and outputting from the Mobile Switching Center a partial call data record comprising a subscriber telephone number in order to bill a mobile subscriber within a specific air interface/system through a wireless mobile switch which a bill is partially produced in route to the terminating end switching office to form a complete bill for the caller, as taught by Plush et al..

5. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Bushnell, newly recited reference, as applied to claims 1 and 6 above and in

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further view of Buscher et al. and Vaziri et al., newly recited reference.

Regarding claims 5 and 7, the combination of Rainey et al. and Bushnell differs from claims 5 and 7 of the claimed invention in that they do not explicit disclose outputting said call record to an external billing system (data storage system) and said partial call data record consist of the called party number. Buscher et al. teaches outputting said call record to an external billing system (data storage system) (fig. 1 numbers 50 and 260 and col. 2 lines 55-67 and col. 3 lines 1-7). Vaziri et al. teaches an internet switch box (server) that generates a partial billing record which contains a telephone number of the other party (paragraph 0158). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the combination of Rainey et al. and Bushnell with outputting said call record to an external billing system (data storage system) and said partial call data record consist of the called party number in order to reduce accounting duties within the End switching Office, and bill the calling party from the automatic message accounting record received from the originating End switching Office to form a

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partial telephone bill for that End switching Office, as taught by Buscher et al. and Vaziri et al., newly recited reference.

### ***Response to Arguments***

6. Applicant's arguments filed May 25, 2005 have been fully considered but they are not deemed to be persuasive. The following are explanations to the applicant arguments:

7. Argument: Regarding claims 1,6 and 9, Applicant alleges that Rainey does not "send a call data record to the exchange of the network prior to receiving a call answer message".

Explanation: Examiner agrees with applicant. However, claims 1,6 and 9 do not recite "send a call data record to the exchange of the network prior to receiving a call answer message".

8. Argument: Regarding claim 1, applicant alleges that neither Rainey nor Bushnell suggest "sending a partial CDR to the data storage system prior to receiving a call answer message".

Explanation: Examiner agrees with applicant. However, claim 1 does not recite ""sending a partial CDR to the data storage system prior to receiving a call answer message".

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (571) 272-7865. The examiner can normally be reached on 6:30am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson  
Art Unit 2683  
August 3, 2005

**KEITH FERGUSON**  
**PRIMARY EXAMINE**

*Keith Ferguson*